Sound levels

Fluid power systems are inherent generators of noise. As with many high power density devices, noise is an unwanted side affect. However, there are many techniques available to minimize noise from fluid power systems. To apply these methods effectively, it is necessary to understand how the noise is generated and how it reaches the listener. The noise energy can be transmitted away from its source as either fluid borne noise (pressure ripple) or as structure borne noise.

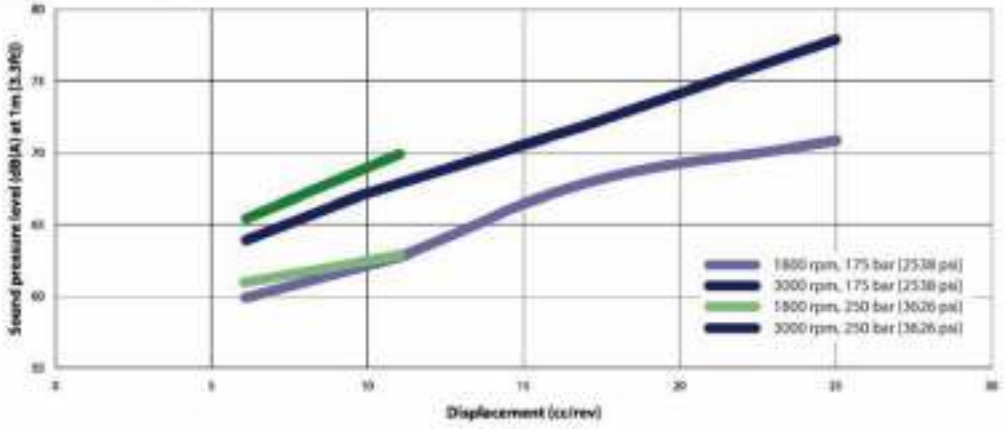
Pressure ripple is the result of the number of pumping elements (gear teeth) delivering oil to the outlet and the pump's ability to gradually change the volume of each pumping element from low to high pressure. In addition, the pressure ripple is affected by the compressibility of the oil as each pumping element discharges into the outlet of the pump. Pressure pulsations will travel along the hydraulic lines at the speed of sound (about 1400 m/s in oil) until affected by a change in the system such as an elbow fitting. Thus the pressure pulsation amplitude varies with overall line length and position.

Structure borne noise may be transmitted wherever the pump casing is connected to the rest of the system. The manner in which one circuit component responds to excitation depends on its size, form, and manner in which it is mounted or supported. Because of this excitation, a system line may actually have a greater noise level than the pump. To reduce this excitation, use flexible hoses in place of steel plumbing. If steel plumbing must be used, clamping of lines is recommended. To minimize other structure borne noise, use flexible (rubber) mounts.

The accompanying graph shows typical sound pressure levels for SNP3NN pumps (with SAE A flange, and spline shaft in plug in drive) measured in dB (A) at 1 m [3.28 ft] from the unit in a semi-anechoic chamber. Anechoic levels can be estimated by subtracting 3 dB (A) from these values.

Contact your Turolla representative for assistance with system noise control.

Sound levels graph

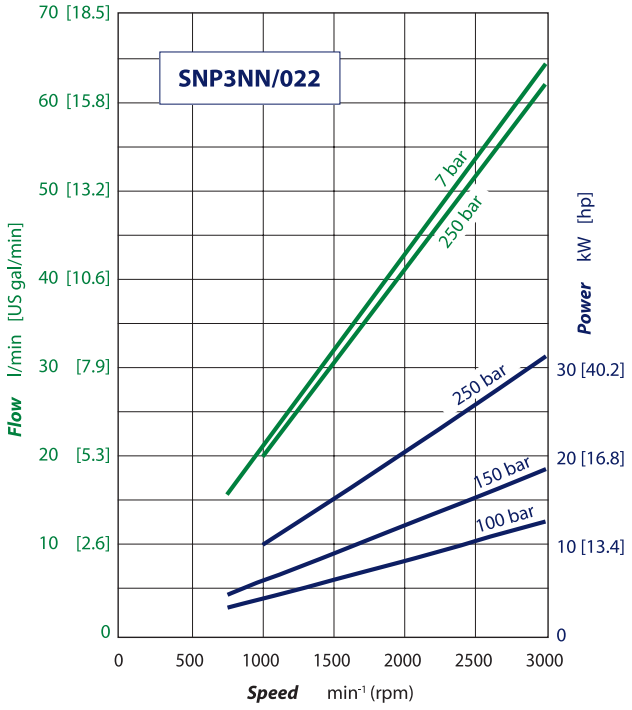


Pump Performance

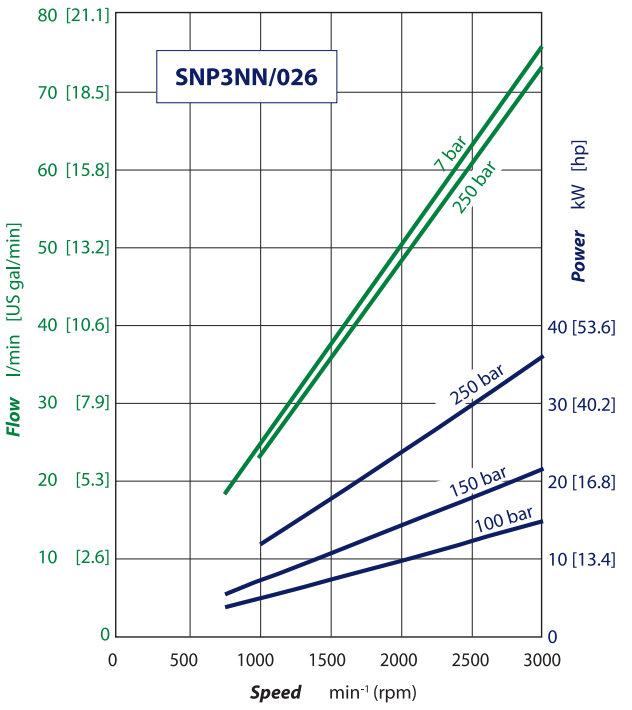
Pump Performance graphs

The graphs on the next few pages provide typical output flow and input power for Group 3 pumps at various working pressures. Data were taken using ISO VG46 petroleum /mineral based fluid at 50 °C [122 °F] (viscosity = 28 mm²/s [132 SUS]).

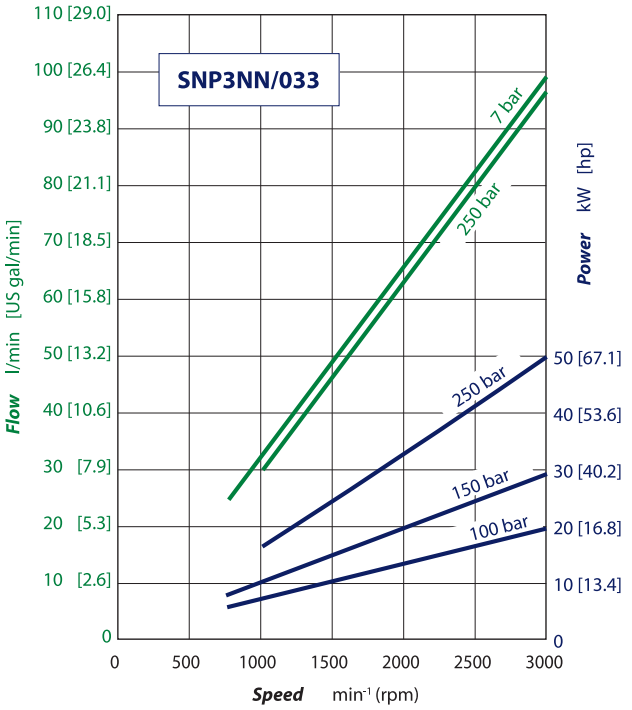
SNP3NN/022 pump performance graph



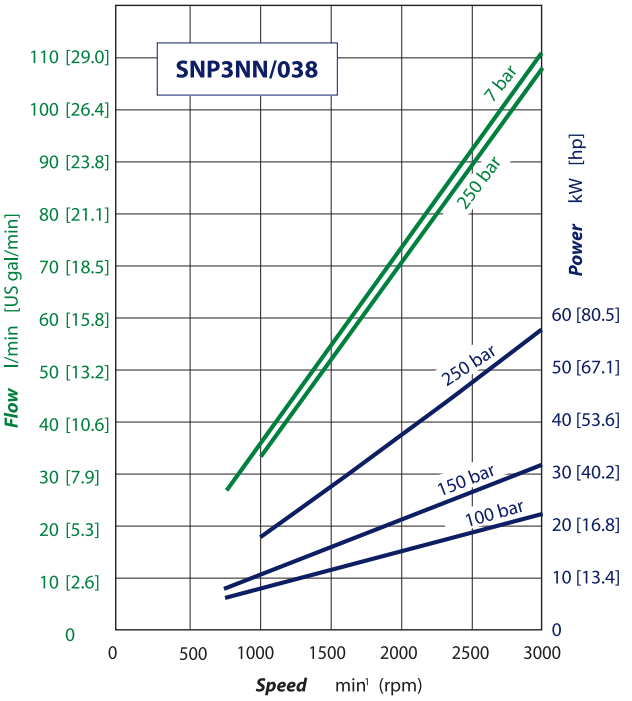
SNP3NN/026 pump performance graph



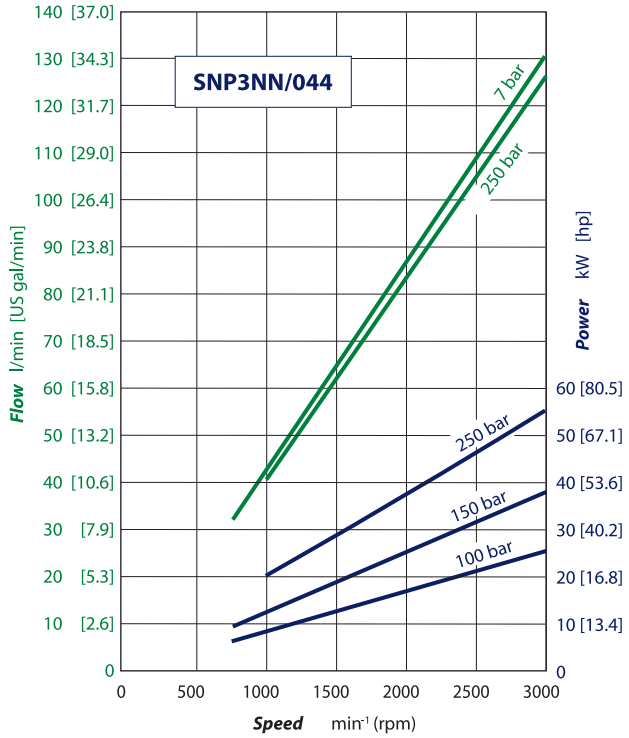
SNP3NN/033 pump performance graph



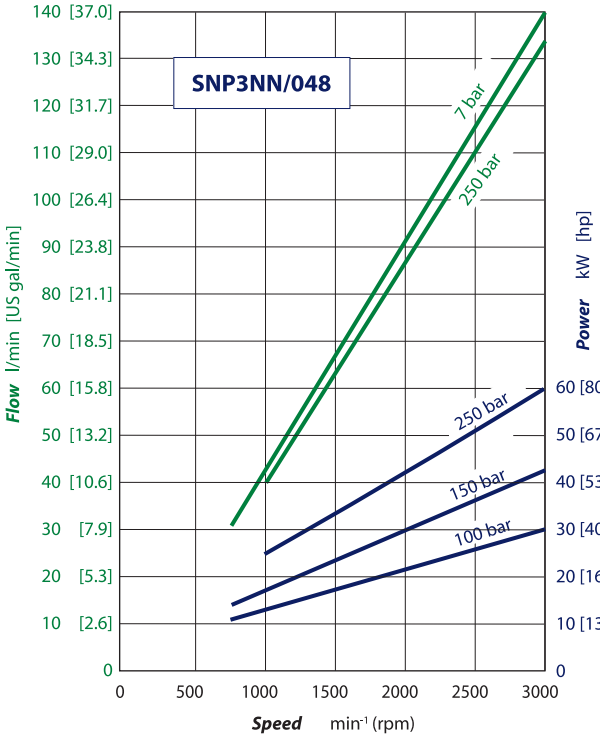
SNP3NN/038 pump performance graph



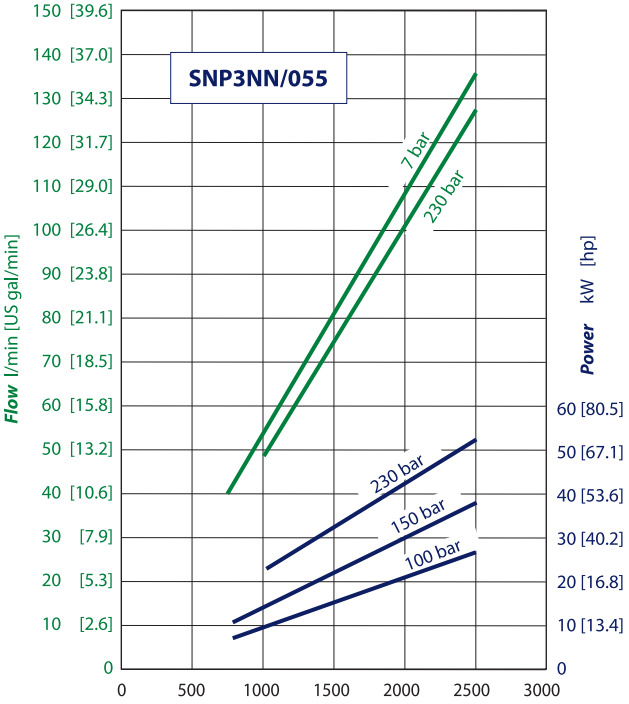
SNP3NN/044 pump performance graph



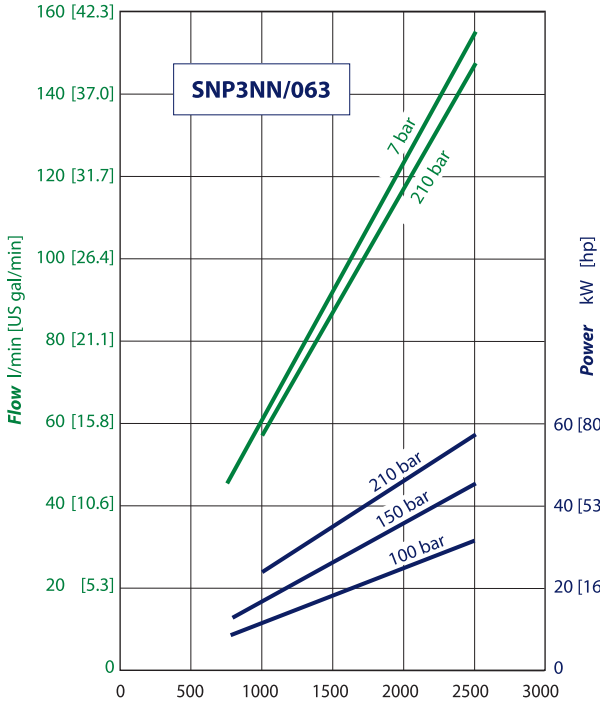
SNP3NN/048 pump performance graph



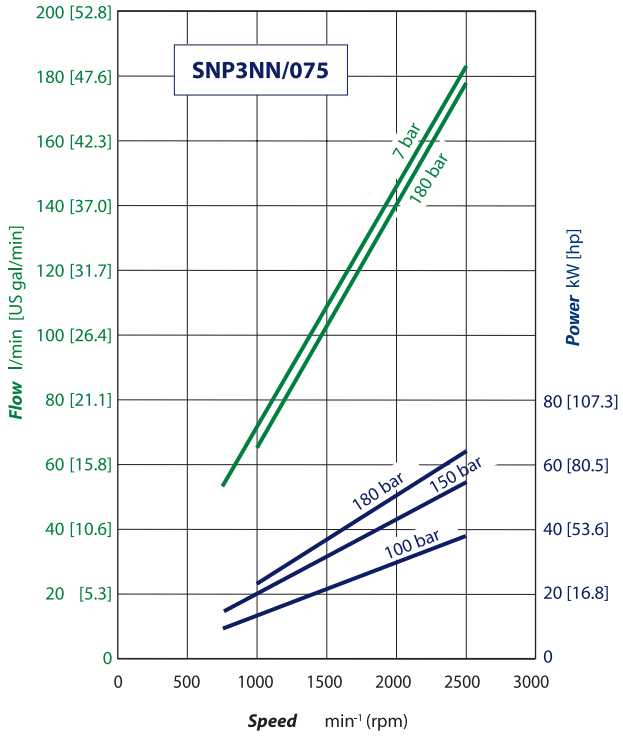
SNP3NN/055 pump performance graph



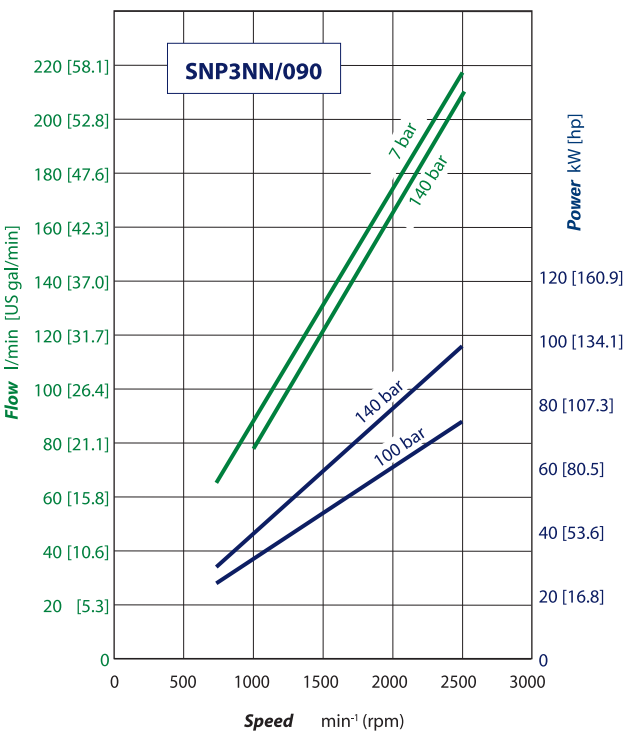
SNP3NN/063 pump performance graph



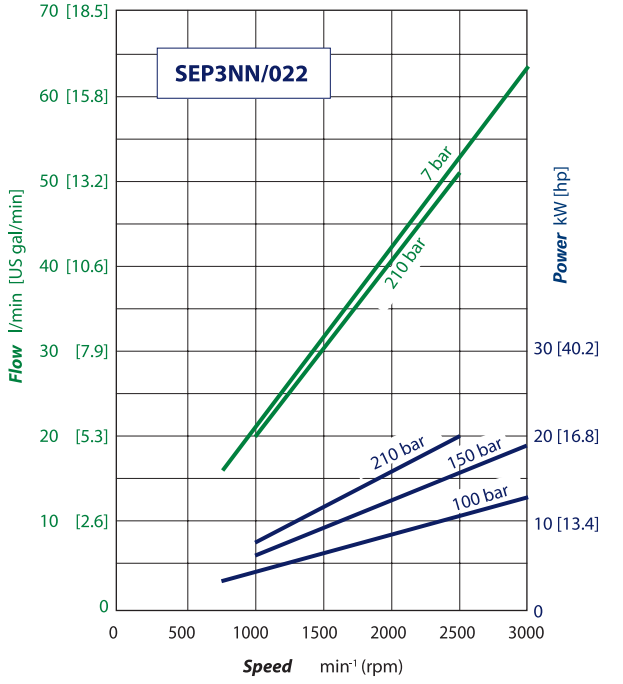
SNP3NN/075 pump performance graph



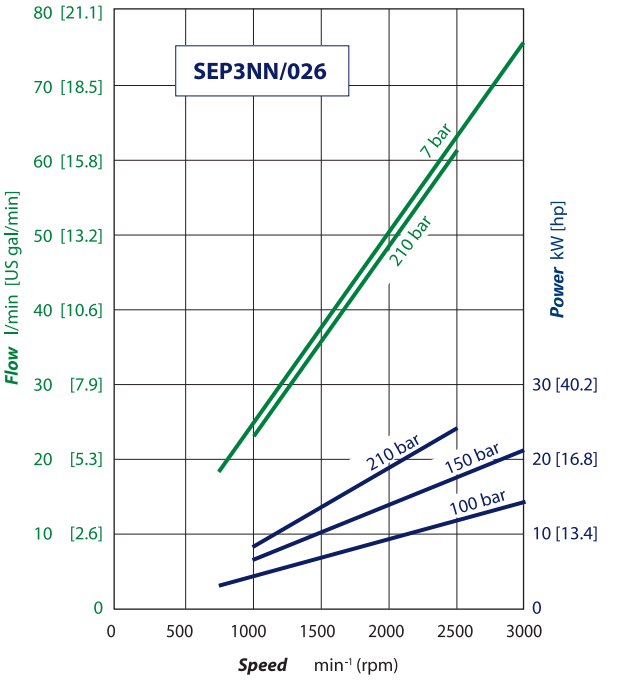
SNP3NN/090 pump performance graph



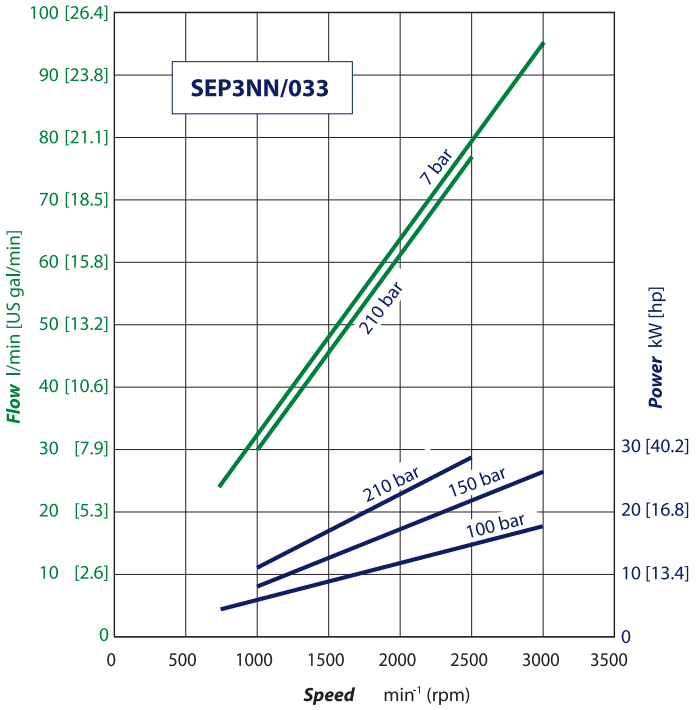
SEP3NN/022 pump performance graph



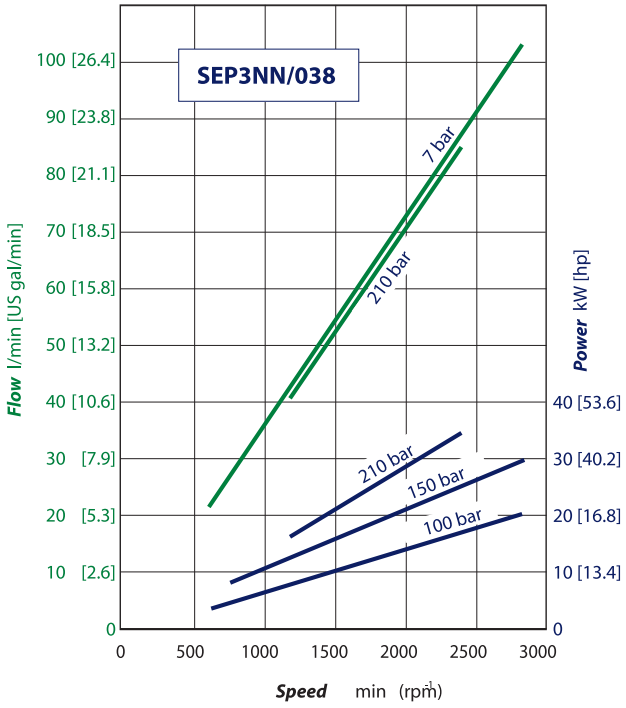
SEP3NN/026 pump performance graph



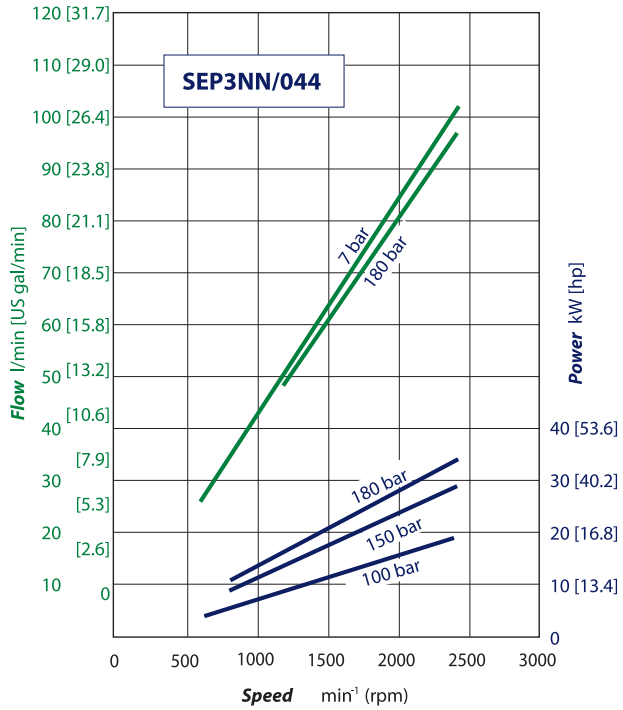
SEP3NN/033 pump performance graph



SEP3NN/038 pump performance graph

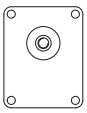
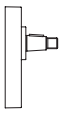
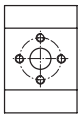
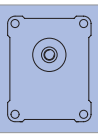
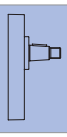
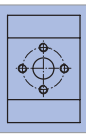
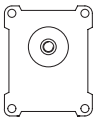
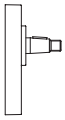
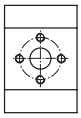
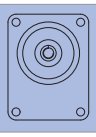
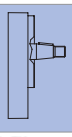
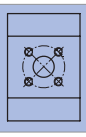
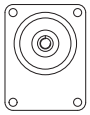
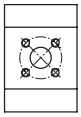
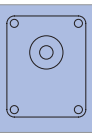
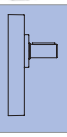
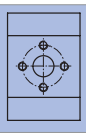
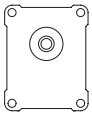
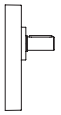
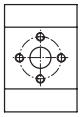
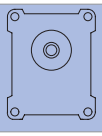
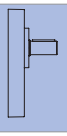
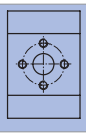
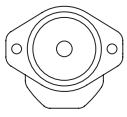
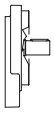
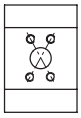
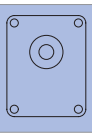
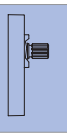
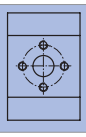
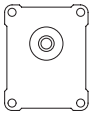
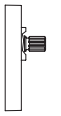
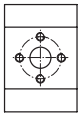


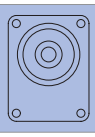
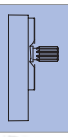
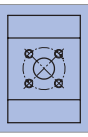
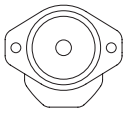
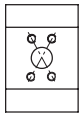
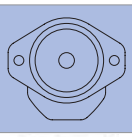
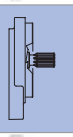
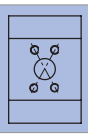
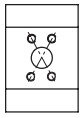
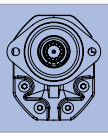
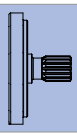
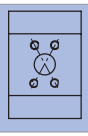
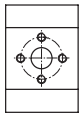
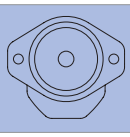
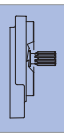
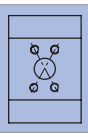
SEP3NN/044 pump performance graph



Product Options

Shaft, flange, and port configurations

Pump	Code	Flange		Shaft		Port	
SEP3NN SNP3NN	**01BA**	pilot Ø 50.8 mm [2.0 in] European 01, 4-bolt		1:8 tapered		European flanged port + pattern	
SNP3NN	**02BA**	pilot Ø 50.8 mm [2.0 in] European 02, 4-bolt		1:8 tapered		European flanged port + pattern	
SNP3NN	**03BB**	pilot Ø 60.3 mm [2.374 in] European 03, 4-bolt		1:8 tapered		European flanged port + pattern	
SNP3NN	**06AA**	pilot Ø 105 mm [4.133 in] German, 4-bolt		1:5 tapered		German std ports port **X** pattern	
SNP3NN	**06CA**	pilot Ø 105 mm [4.133 in] German, 4-bolt		Tang 8 x Ø 22,2		German std ports port **X** pattern	
SEP3NN SNP3NN	**01FA**	pilot Ø 50.8 mm [2.0 in] European 01, 4-bolt		Ø 20 mm [0.787 in] parallel		European flanged port + pattern	
SNP3NN	**02FA**	pilot Ø 50.8 mm [2.0 in] European 02, 4-bolt		Ø 20 mm [0.787 in] parallel		European flanged port + pattern	
SNP3NN	**03FB**	pilot Ø 60.3 mm [2.374 in] European 03, 4-bolt		Ø 22 mm [0.866 in] parallel		European flanged port + pattern	
SEP3NN SNP3NN	**07GA**	pilot Ø 101.6 mm [4.0 in] SAE B, 2-bolt		Ø 22.225 mm [0.875 in] parallel		Vertical four bolt flanged port	
SNP3NN	**01DA**	pilot Ø 50.8 mm [2.0 in] European 01, 4-bolt		Splined shaft 13T - m 1.60 DIN 5482-B22x19		European flanged port + pattern	
SNP3NN	**02DA**	pilot Ø 50.8 mm [2.0 in] European 02, 4-bolt		Splined shaft 13T - m 1.60 DIN 5482-B22x19		European flanged port + pattern	

SNP3NN	**06DD**	pilot Ø 105 mm [4.0 in] German, 4-bolt		Splined shaft 15T - m 1.75 DIN 5482-B28x25		German std ports port **X** pattern	
SNP3NN	**07BC**	pilot Ø 101.6 mm [4.0 in] SAE B, 2-bolt		1:8 tapered - 5/8 - 18 UNF - 2A		Vertical four bolt flanged port	
SEP3NN **SNP3NN**	**07SA**	pilot Ø 101.6 mm [4.0 in] SAE B, 2-bolt		Splined shaft SAE J498 13T - 16/32DP		Vertical four bolt flanged port	
SNP3NN	**08RA**	pilot Ø 127 mm [5.0 in] SAE C, 4-bolt		Splined shaft SAE J498 14T - 12/24DP		Vertical four bolt flanged port	
SNP3NN	**09SB**	pilot Ø 82.55 mm [3.25 in] SAE A, 2-bolt		Splined shaft SAE J498 13T - 16/32DP		Vertical four bolt flanged port	
SNP3NN	**91BA**	Outrigger bearing with European four bolt flange Pilot Ø50,8		Taper 1:8 M14x1,5 key 4x7,5		European flanged port + pattern	
SNP3NN	**D7SA**	pilot Ø 101.6 mm [4.0 in] SAE B, 2-bolt, special for double shaft seal		Splined shaft SAE J498 13T - 16/32DP		Vertical four bolt flanged port	

Mounting flanges

Turolla offers many types of industry standard mounting flanges. This table shows order codes for each available mounting flange and its intended use:

Flange availability

Code	Description
01	European 50.8 mm [2.0 in] 4-bolt
02	
03	European 60.3 mm [2.374 in] 4-bolt
06	German 105 mm [4.134 in] 4-bolt
07	SAE B 2-bolt
08	SAE C 4-bolt
09	SAE A 2-bolt

Shaft options

Direction is viewed facing the shaft. Group 3 pumps are available with a variety of splined, parallel, and tapered shaft ends. Not all shaft styles are available with all flange styles.

Shaft availability and nominal torque capability

Shaft		Mounting flange code with maximum torque in Nm [lb•in]							
Code	**Description**	**01**	**02**	**03**	**06**	**07**	**08**	**09**	**D7**
AA	Taper 1:5-M16x1,5-Key 5				300				
BA	Taper 1:8-M14x1,5-Key 4	350	350						
BB	Taper 1:8-M16x1,5-Key 4,79			500					
BC	Taper 1:8-5/8-18UNF-2A-Key 6,375					300			
BD	Taper 1:8-M14x1,5-Key 4 + thd hole M8 - Special					300			
BP	Taper 1:8-5/8-18UNF-2A-Key 6,375 with NUT & WASHER (for SAE B flange)					300			
CA	Tang 8xØ22,2 - Special				90				
DA	DIN 5482 B22x19 L=24 (for flange 01)	290	290						
DD	DIN 5482 B28x25 L28 (for flange 06)				450				
FA	Parallel Ø20-Key 5x5 L30 (for flange 01-02)	210	210						
FB	Parallel Ø22-Key 5x5 L40 (for flange 03)			300					
GA	Parallel Ø22,225 x L25,4-Key 6,375x6,375 L25,4					230			
GB	Parallel Ø22,225xL25,4-Key 6,375x6,375x25,4+thd hole:1/4-20UNC-2B					230			
GC	Parallel Ø22,225xL25,4-Key 6,375x6,375x25,4+thd hole:5/16-18UNC-2B - Special					230			
SA	SAE J498-13T-16/32-SAE B					270			270
SB	SAE J498-13T-16/32-SAE A (for flange 09)							270	
RA	SAE J498-14T-12/24-SAE C-4 bolt (for flange 08)						400		
SH	SAE J498-15T-16/32-SAE B - Special					400			

Turolla recommends mating splines conform to SAE J498 or DIN 5482. Turolla external SAE splines have a flat root side fit with circular tooth thickness reduced by 0.127 mm [0.005 in] in respect to class 1 fit. Dimensions are modified to assure a clearance fit with the mating spline.

Caution

Shaft torque capability may limit allowable pressure. Torque ratings assume no external radial loading. Applied torque must not exceed these limits, regardless of stated pressure parameters. Maximum torque ratings are based on shaft torsional fatigue strength.

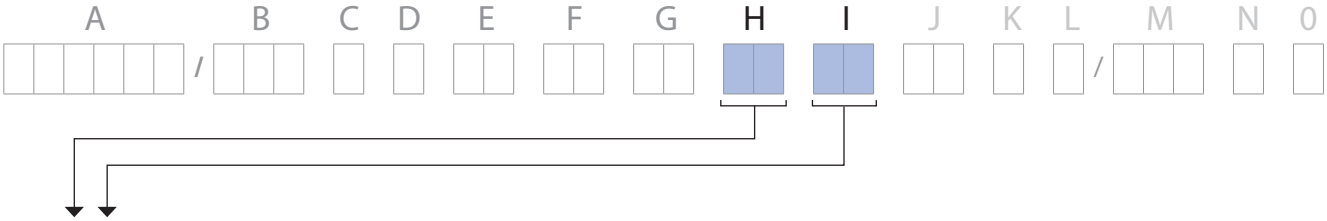
Port configurations

Various port configurations are available on Group 3 pumps. They include:

- European standard flanged ports
- German standard flanged ports
- Gas threaded ports (BSPP)
- O-Ring boss (following SAE J1926/1 [ISO 11926-1] UNF threads, standard)

A table of dimensions is on the next page.

Available port configurations



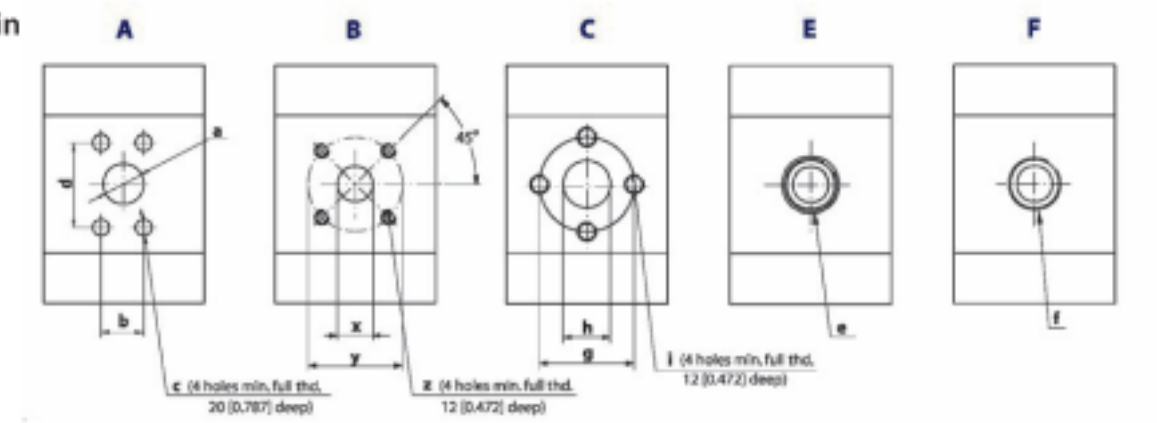
H Inlet port

Code	Description	
A2	8,5x22,23x47,63x ⅜ -16UNC	SAE flanged port
A3	25x26,19x52,37x ⅜ -16UNC	
A4	31x30,18x58,72x 7/16 -14UNC	
A5	37,5/27x35,7x69,85x ½ -13UNC	
B7	20x40xM6	Flanged port with thd holes in **X** pattern
BA	18x55xM8	
BB	27x55xM8	
BC	36/27x55xM8	
C3	13,5x30xM6	Flanged port with thd holes in **+** pattern
C7	20x40xM8	
CA	27x51xM10	
CD	36x62xM10	
E6	1 1/16-12UN	Thd SAE O-ring boss port
E8	1 5/16-12UN	
E9	1 5/8-12UN	
EA	1 7/8-12UN	
F5	¾ GAS	Threaded GAS (BSPP)
F6	1 GAS	
F7	1 ¼ GAS	

I Outlet port

For code letters and descriptions see the table above.

Portin



Ports dimensions

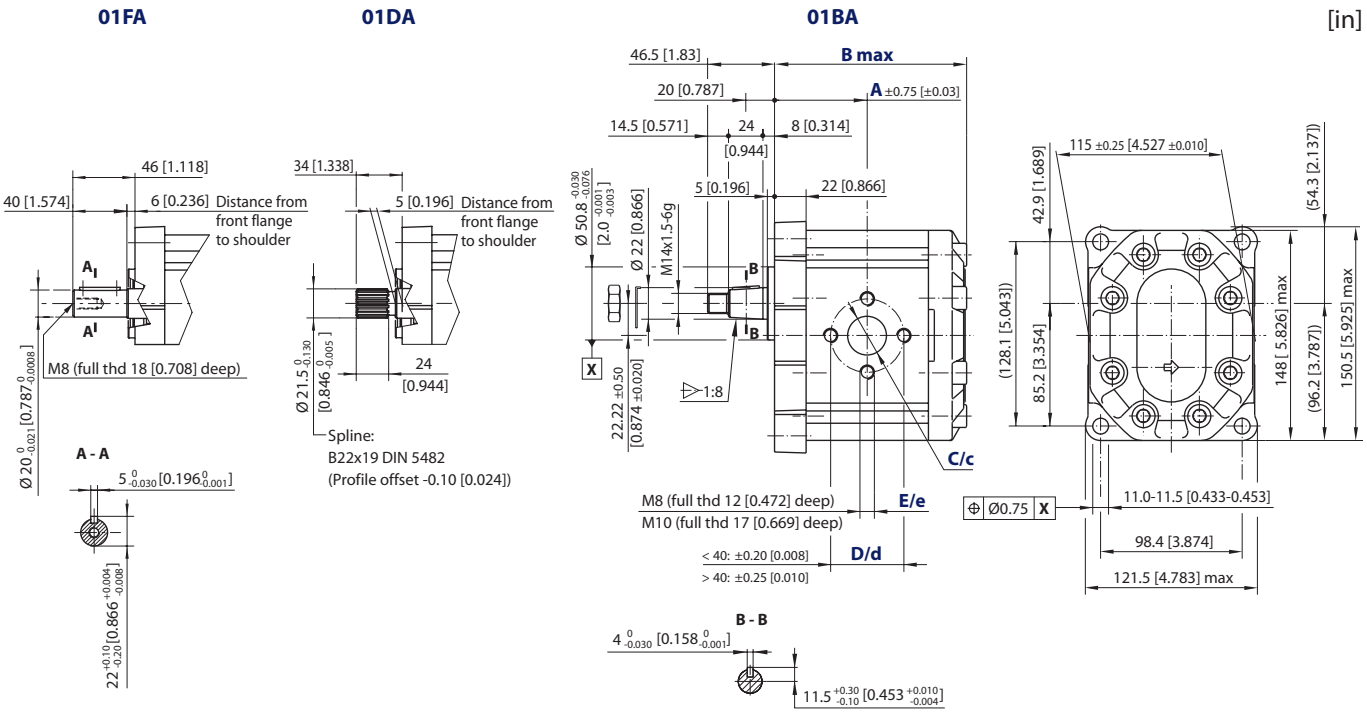
Port type														
Dimensions			a	b	d	c	x	y	z	g	h	i	e	f
Type (displacement)	022	Inlet	25.4 [1.000]	26.19 [1.031]	52.37 [2.062]	3/8–16UNC–2B	27 [1.063]	55 [2.165]	M8	40 [1.575]	20 [0.787]	M8	1 5/16–12UN–2B	¾ Gas (BSPP)
		Outlet	19.1 [0.752]	22.23 [0.875]	47.63 [1.875]	3/4–16UNC–2B	18 [0.709]	55 [2.165]	M8	40 [1.575]	20 [0.787]	M8	1 1/16–12UN–2B	¾ Gas (BSPP)
	026	Inlet	25.4 [1.000]	26.19 [1.031]	52.37 [2.062]	3/8–16UNC–2B	27 [1.063]	55 [2.165]	M8	40 [1.575]	20 [0.787]	M8	1 5/16–12UN–2B	¾ Gas (BSPP)
		Outlet	19.1 [0.752]	22.23 [0.875]	47.63 [1.875]	3/4–16UNC–2B	18 [0.709]	55 [2.165]	M8	40 [1.575]	20 [0.787]	M8	1 1/16–12UN–2B	¾ Gas (BSPP)
	033	Inlet	31.8 [1.252]	30.18 [1.188]	58.72 [2.312]	7/16–14UNC–2B	27 [1.063]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 5/8– 12UN–2B	1 Gas (BSPP)
		Outlet	25.4 [1.000]	26.19 [1.031]	52.37 [2.062]	3/4–16UNC–2B	18 [0.709]	55 [2.165]	M8	40 [1.575]	20 [0.787]	M8	1 1/16–12UN–2B	¾ Gas (BSPP)
	038	Inlet	31.8 [1.252]	30.18 [1.188]	58.72 [2.312]	7/16–14UNC–2B	27 [1.063]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 5/8–12UN–2B	1 Gas (BSPP)
		Outlet	25.4 [1.000]	26.19 [1.031]	52.37 [2.062]	3/4–16UNC–2B	18 [0.709]	55 [2.165]	M8	40 [1.575]	20 [0.787]	M8	1 1/16–12UN–2B	¾ Gas (BSPP)
	044	Inlet	31.8 [1.252]	30.18 [1.188]	58.72 [2.312]	7/16–14UNC–2B	27 [1.063]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 5/8–12UN–2B	1 Gas (BSPP)
		Outlet	25.4 [1.000]	26.19 [1.031]	52.37 [2.062]	3/4–16UNC–2B	18 [0.709]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 1/16–12UN–2B	1 Gas (BSPP)
	048	Inlet	31.8 [1.252]	30.18 [1.188]	58.72 [2.312]	7/16–14UNC–2B	27 [1.063]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 5/8–12UN–2B	1 Gas (BSPP)
		Outlet	25.4 [1.000]	26.19 [1.031]	52.37 [2.062]	3/4–16UNC–2B	18 [0.709]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 1/16–12UN–2B	1 Gas (BSPP)
	055	Inlet	38.1 [1.500]	35.71 [1.406]	69.85 [2.750]	½–13UNC–2B	27 [1.063]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 7/8–12UN–2B	1 Gas (BSPP)
		Outlet	31.8 [1.252]	30.18 [1.188]	58.72 [2.312]	7/8–14UNC–2B	18 [0.709]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 5/8–12UN–2B	1 Gas (BSPP)
	063	Inlet	38.1 [1.500]	35.71 [1.406]	69.85 [2.750]	½–13UNC–2B	36 [1.417]	55 [2.165]	M8	62 [2.441]	36 [1.417]	M10	1 7/8–12UN–2B	1¼ Gas (BSPP)
		Outlet	31.8 [1.252]	30.18 [1.188]	58.72 [2.312]	7/8–14UNC–2B	27 [1.063]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 5/8–12UN–2B	1 Gas (BSPP)
	075	Inlet	38.1 [1.500]	35.71 [1.406]	69.85 [2.750]	½–13UNC–2B	36 [1.417]	55 [2.165]	M8	62 [2.441]	36 [1.417]	M10	1 7/8–12UN–2B	1¼ Gas (BSPP)
		Outlet	31.8 [1.252]	30.18 [1.188]	58.72 [2.312]	7/8–14UNC–2B	27 [1.063]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 5/8–12UN–2B	1 Gas (BSPP)
	090	Inlet	38.1 [1.500]	35.71 [1.406]	69.85 [2.750]	½–13UNC–2B	36 [1.417]	55 [2.165]	M8	62 [2.441]	36 [1.417]	M10	1 7/8–12UN–2B	1¼ Gas (BSPP)
		Outlet	31.8 [1.252]	30.18 [1.188]	58.72 [2.312]	7/8–14UNC–2B	27 [1.063]	55 [2.165]	M8	51 [2.008]	27 [1.063]	M10	1 5/8–12UN–2B	1 Gas (BSPP)

Dimensions

SNP3NN – 01FA, 01DA, 01BA / SEP3NN – 01BA

The drawing shows the SNP3NN standard porting for 01FA, 01DA and 01BA. The configurations 01FA and 01BA are available for the **SEP3NN**.

mm
[in]



SNP3NN – 01FA, 01BA, 01DA and SEP3NN – 01FA, 01BA dimensions

Frame size		022	026	033	038	044	048	055	063	075	090
Dimension	A	63 [2.480]	64.5 [2.539]	67 [2.637]	68.8 [2.708]	71 [2.795]	72.5 [2.854]	75 [2.952]	78 [3.07]	82 [3.228]	87 [3.425]
	B	132.5 [5.216]	135.5 [5.334]	140.5 [5.531]	144 [5.669]	148.5 [5.846]	151.5 [5.964]	156.5 [6.161]	162.5 [6.397]	170.5 [6.712]	180.5 [7.106]
Inlet	C	20 [0.787]		27 [1.063]				36 [1.417]			
	D	40 [1.575]		51 [2.007]				62 [2.441]			
	E	M8		M10							
Outlet	c	20 [0.787]				27 [1.063]					
	d	40 [1.575]				51 [2.001]					
	e	M8				M10					

The SEP3NN overall length is 12 mm [0.472 in] less than the SNP3NN for the whole range of displacements (22.1 to 44.1 cm3/rev [1.35 to 2.69 in3/rev]).

Model code examples and maximum shaft torque

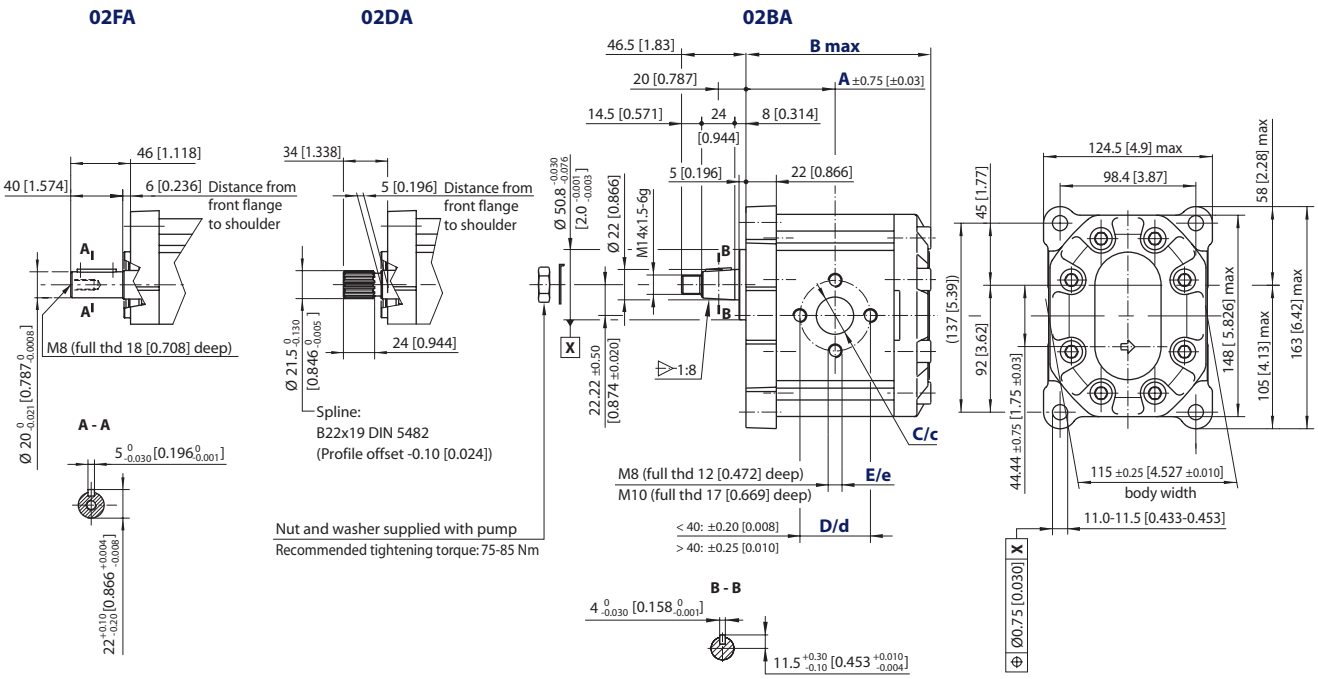
Flange/drive gear	Model code example	Maximum shaft torque
01DA	SNP3NN/075LN01DAP1CDCANNNN/NNNNN	290 N•m [2566 lb•in]
01FA	SNP3NN/033RN01FAP1CAC7NNNN/NNNNN	210 N•m [1858 lb•in]
01BA	SNP3NN/022RN01BAP1C7C7NNNN/NNNNN	350 N•m [3097 lb•in]

For further details on ordering, see Model Code, pages 8 - 11.

SNP3NN – 02FA, 02DA and 02BA

This drawing shows the standard porting for 02FA, 02DA and 02BA.

mm
[in]



SNP3NN – 02FA, 02DA and 02BA dimensions

Frame size		022	026	033	038	044	048	055	063	075	090
Dimension	A	63 [2.480]	64.5 [2.539]	67 [2.637]	68.8 [2.708]	71 [2.795]	72.5 [2.854]	75 [2.952]	78 [3.07]	82 [3.228]	87 [3.425]
	B	132.5 [5.216]	135.5 [5.334]	140.5 [5.531]	144 [5.669]	148.5 [5.846]	151.5 [5.964]	156.5 [6.161]	162.5 [6.397]	170.5 [6.712]	180.5 [7.106]
Inlet	C	20 [0.787]		27 [1.063]				36 [1.417]			
	D	40 [1.575]		51 [2.007]				62 [2.441]			
	E	M8		M10							
Outlet	c	20 [0.787]				27 [1.063]					
	d	40 [1.575]				51 [2.001]					
	e	M8				M10					

Model code examples and maximum shaft torque

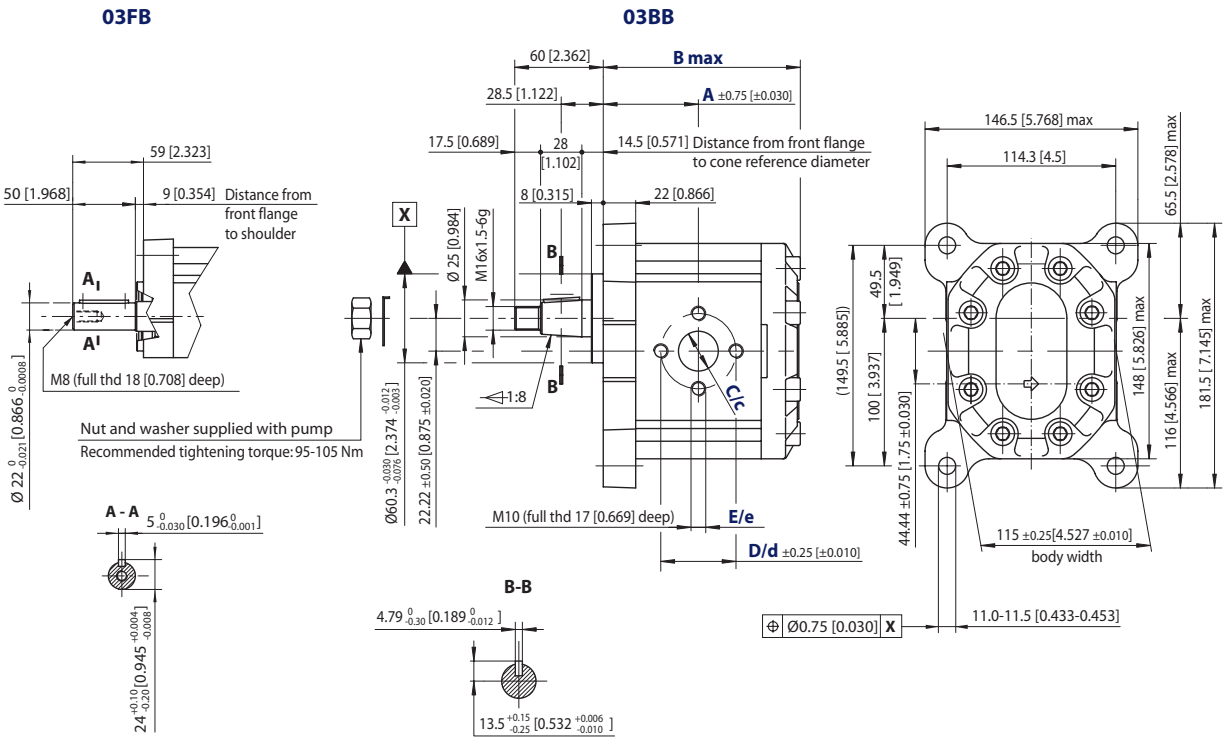
Flange/drive gear configuration	Model code example	Maximum shaft torque N•m [lb•in]
02FA	SNP3NN/044RN02FAP1CACANNNN/NNNNN	210 [1858]
02DA	SNP3NN/033RN02DAP1CAC7NNNN/NNNNN	290 [2566]
02BA	SNP3NN/026LN02BAP1C7C7NNNN/NNNNN	350 [3097]

For further details on ordering, see Model Code, pages 8 - 11.

SNP3NN – 03FB, 03BB

This drawing shows the standard porting for 03FB and 03BB.

mm
[in]



SNP3NN – 03FB and 03BB dimensions

Type (displacement)		022	026	033	038	044	048	055	063	075	090
Dimension	A	63.0 [2.480]	64.5 [2.539]	67.0 [2.637]	68.8 [2.708]	71.0 [2.795]	72.5 [2.854]	75.0 [2.952]	78.0 [3.070]	82.0 [3.228]	87.0 [3.425]
	B	132.5 [5.216]	135.5 [5.334]	140.5 [5.531]	144.0 [5.669]	148.5 [5.846]	151.5 [5.964]	156.5 [6.161]	162.5 [6.397]	170.5 [6.712]	180.5 [7.106]
Inlet	C	20 [0.787]		27 [1.063]				36 [1.417]			
	D	40 [1.575]		51 [2.007]				62 [2.441]			
	E	M8		M10							
Outlet	c	20 [0.787]				27 [1.063]					
	d	40 [1.575]				51 [2.001]					
	e	M8				M10					

Model code examples and maximum shaft torque

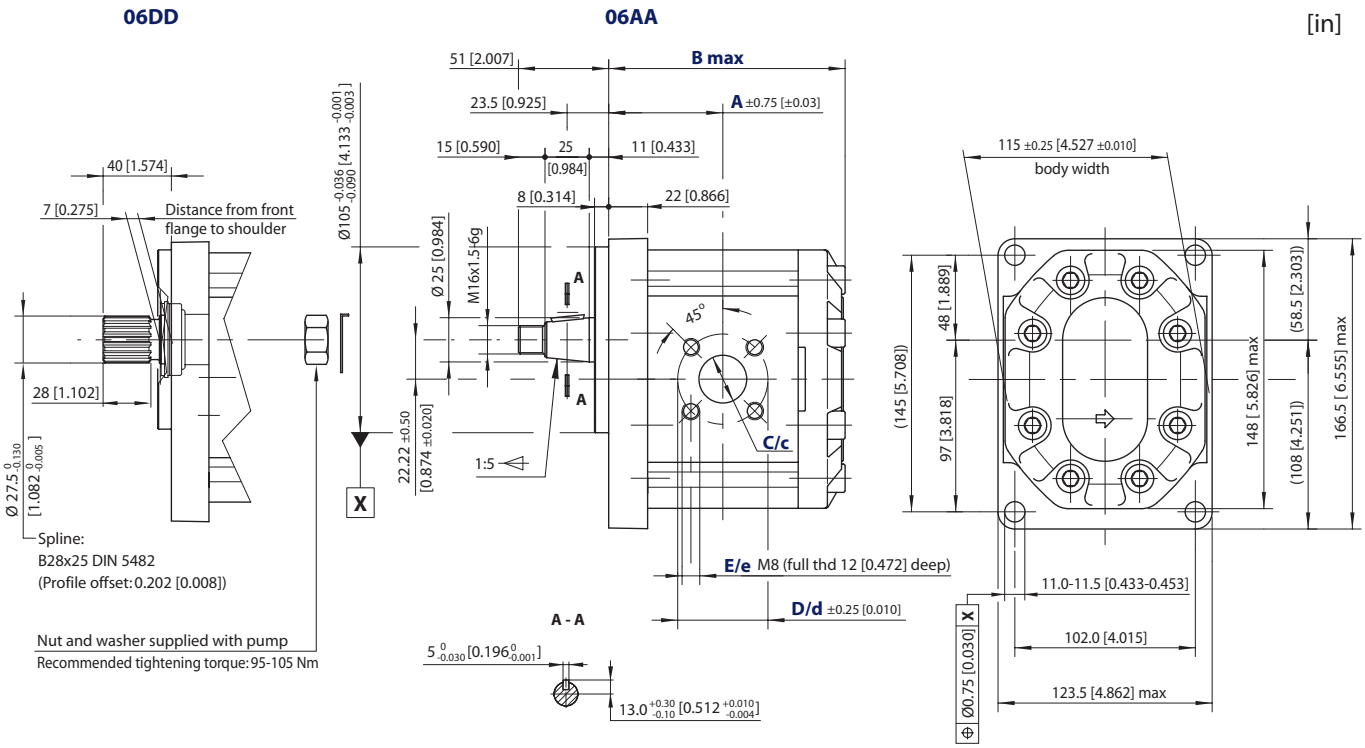
Flange/drive gear configuration	Model code example	Maximum shaft torque N•m [lb•in]
03FB	SNP3NN/044LN03FBP1CACANNNN/NNNNN	300 [2655]
03BB	SNP3NN/090RN03BBP1CDCANNNN/NNNNN	500 [4425]

For further details on ordering, see Model Code, pages 8 - 11.

SNP3NN – 06DD, 06AA

This drawing shows the standard porting for 06DD and 06AA.

mm
[in]



SNP3NN – 06DD and 06AA dimensions

Type (displacement)		022	026	033	038	044	048	055	063	075	090
Dimension	A	63.0 [2.480]	64.5 [2.539]	67.0 [2.637]	68.8 [2.708]	71.0 [2.795]	72.5 [2.854]	75.0 [2.952]	78.0 [3.070]	82.0 [3.228]	87.0 [3.425]
	B	132.5 [5.216]	135.5 [5.334]	140.5 [5.531]	144.0 [5.669]	148.5 [5.846]	151.5 [5.964]	156.5 [6.161]	162.5 [6.397]	170.5 [6.712]	180.5 [7.106]
Inlet	C	27 [1.063]							36 [1.417]		
	D	55 [2.165]									
	E	M8									
Outlet	c	18 [0.708]							27 [1.063]		
	d	55 [2.165]									
	e	M8									

Model code examples and maximum shaft torque

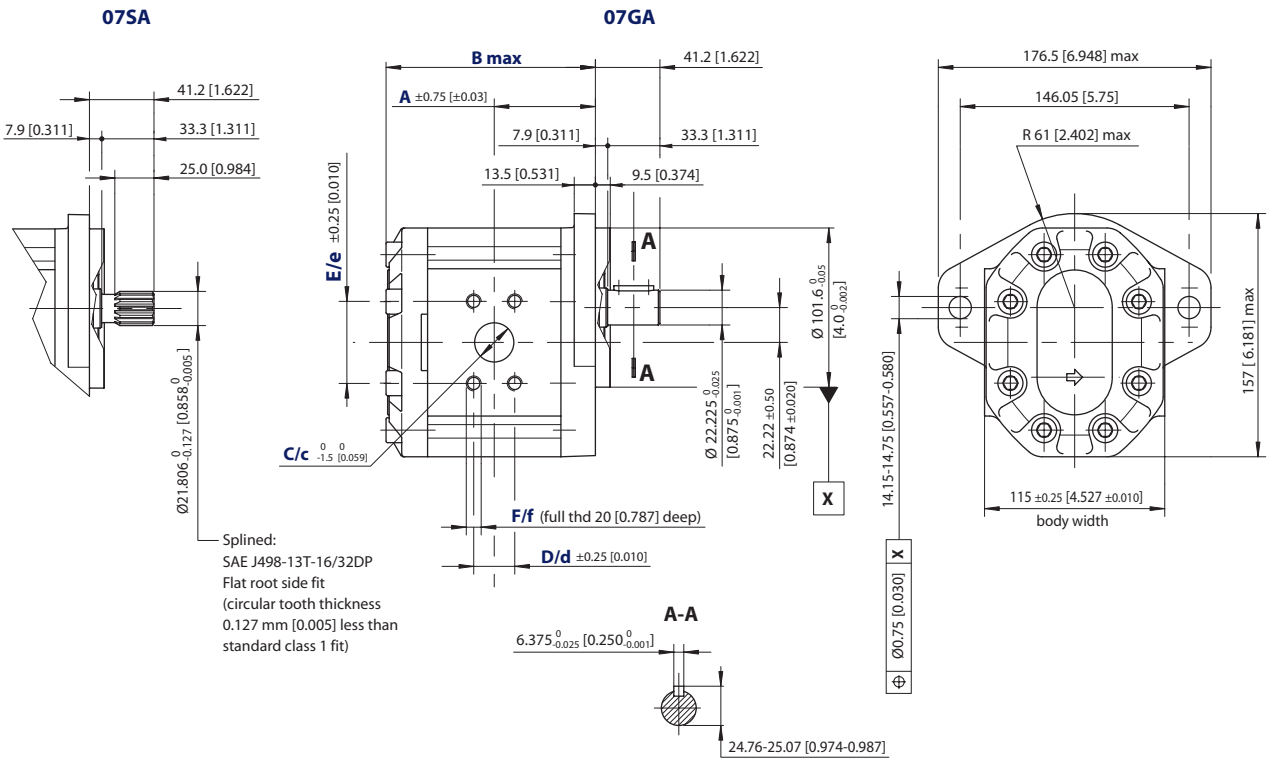
Flange/drive gear configuration	Model code example	Maximum shaft torque N•m [lb•in]
06DD	SNP3NN/044RN06DDP1BBBANNNN/NNNNN	450 [3982]
06AA	SNP3NN/026LN06AAP1BBBANNNN/NNNNN	300 [2655]

For further details on ordering, see Model Code, pages 8 - 11.

SNP3NN and SEP3NN – 07SA, 07GA

The drawing shows the SNP3NN standard porting for 07SA and 07GA. The same configurations are available for the **SEP3NN**.

mm
[in]



The SEP3NN overall length is 12 mm [0.472 in] less than the SNP3NN for the whole range of displacements (22.1 to 44.1 cm3/rev [1.35 to 2.69 in3/rev]).

SNP3NN, SEP3NN – 07SA and 07GA dimensions

Type (displacement)		022	026	033	038	044	048	055	063	075	090
Dimension	A	63.0 [2.480]	64.5 [2.539]	67.0 [2.637]	68.8 [2.708	71.0 [2.795]	72.5 [2.854]	75.0 [2.952]	78.0 [3.070]	82.0 [3.228]	87.0 [3.425]
	B	132.5 [5.216]	135.5 [5.334]	140.5 [5.531]	144.0 [5.669]	148.5 [5.846]	151.5 [5.964]	156.5 [6.161]	162.5 [6.397]	170.5 [6.712]	180.5 [7.106]
Inlet	C	25.4 [1]		31.8 [1.251]				38.1 [1.5]			
	D	26.19 [1.031]		30.18 [1.188]				35.71 [1.405]			
	E	52.37 [2.061]		58.72 [2.311]				69.85 [2.75]			
	F	3/8–16UNC–2B		7/16–14UNC–2B				1/2–13UNC–2B			
Outlet	c	19.1 [0.751]		25.4 [1.0]				31.8 [1.251]			
	d	22.23 [0.875]		26.19 [1.031]				30.18 [1.188]			
	e	47.63 [1.875]		52.37 [2.061]				58.72 [2.311]			
	f	3/8–16UNC–2B		3/8–16UNC–2B				7/16–14UNC–2B			

SNP3NN and SEP3NN – 07SA, 07GA (cont.)

Model code examples and maximum shaft torque

Flange/drive gear configuration	Model code example	Maximum shaft torque N•m [lb•in]
07SA	SNP3NN/063LN07SAP1A5A4NNNN/NNNNN	270 [2389]
07GA	SNP3NN/026LN07GAP1A3A2NNNN/NNNNN	230 [2035]

For further details on ordering, see Model Code, pages 8-11.

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